PENDLETON COUNTY

(Pendleton County Water Service Area Map)

- Estimated 1999 population of 14,300--67% on public water
- Estimated 2020 population of 17,600--83% on public water
- 175 miles of water lines, with plans for 170 additional miles
- Estimated funding needs for public water 2000-2005--\$840,000
- Estimated funding needs for public water 2006-2020--\$12,090,000

Pendleton County had an estimated population of 14,273 (5,250 households) in 1999 with a projected population of 17,600 (7,500 households) in 2020. Public water is provided to about 2/3 of the county's residents. In areas of the county not served by public water, most of the households rely on hauled water and other sources. About 1,225 customers will be added to public water service through new line extensions in 2000-2020.

Estimated Costs - Proposed Projects, 2000-2005

| COUNTY/System | | New Customers | | Rehab | Source | Treatment | Tanks/ | Total |
|--------------------|-------|---------------|----------------|-----------|-----------|-----------|-----------|-----------|
| | | | | | | | Pumps | |
| | Miles | Number | Cost in \$1000 | in \$1000 |
| PENDLETON | | | | | | | | , |
| East Pendleton W/D | | | | | | | | ` |
| Pendleton W/D | 4.8 | 85 | 230 | | | | | 230 |
| Corinth W/D | 17.3 | 131 | 610 | | | | | 610 |
| Williamstown W/D | | | | | | | | , |
| West Carroll W/D | | | | | | | | , |
| Total | 22.1 | 216 | 840 | | | | | 840 |

Estimated Costs - Proposed Projects, 2006-2020

| COUNTY/System | | New Customers | | Rehab | Source | Treatment | Tanks/ | Total |
|--------------------|-------|---------------|----------------|-----------|-----------|-----------|-----------|-----------|
| | | | | | | | Pumps | |
| | Miles | Number | Cost in \$1000 | in \$1000 |
| PENDLETON | | | | | | | | - |
| East Pendleton W/D | 65.0 | 328 | 2,600 | | | | | 2,600 |
| Pendleton W/D | 79.0 | 665 | 3,200 | | | | 1,200 | 4,400 |
| Williamstown W/D | 2.0 | 14 | 90 | | | | | 90 |
| West Carroll W/D | | | | | | | | , |
| Falmouth | | | | | 5,000 | | | 5,000 |
| Total | 146.0 | 1,007 | 5,890 | | 5,000 | | 1,200 | 12,090 |

PUBLIC WATER SYSTEMS

Pendleton County has 4 public community water systems: 2 municipal, Butler Waterworks and Falmouth Water Department; and 2 water districts, East Pendleton and Pendleton

WATER SERVICE AREAS PENDLETON COUNTY Kentucky

Prepared By: Water Resource Development Commission

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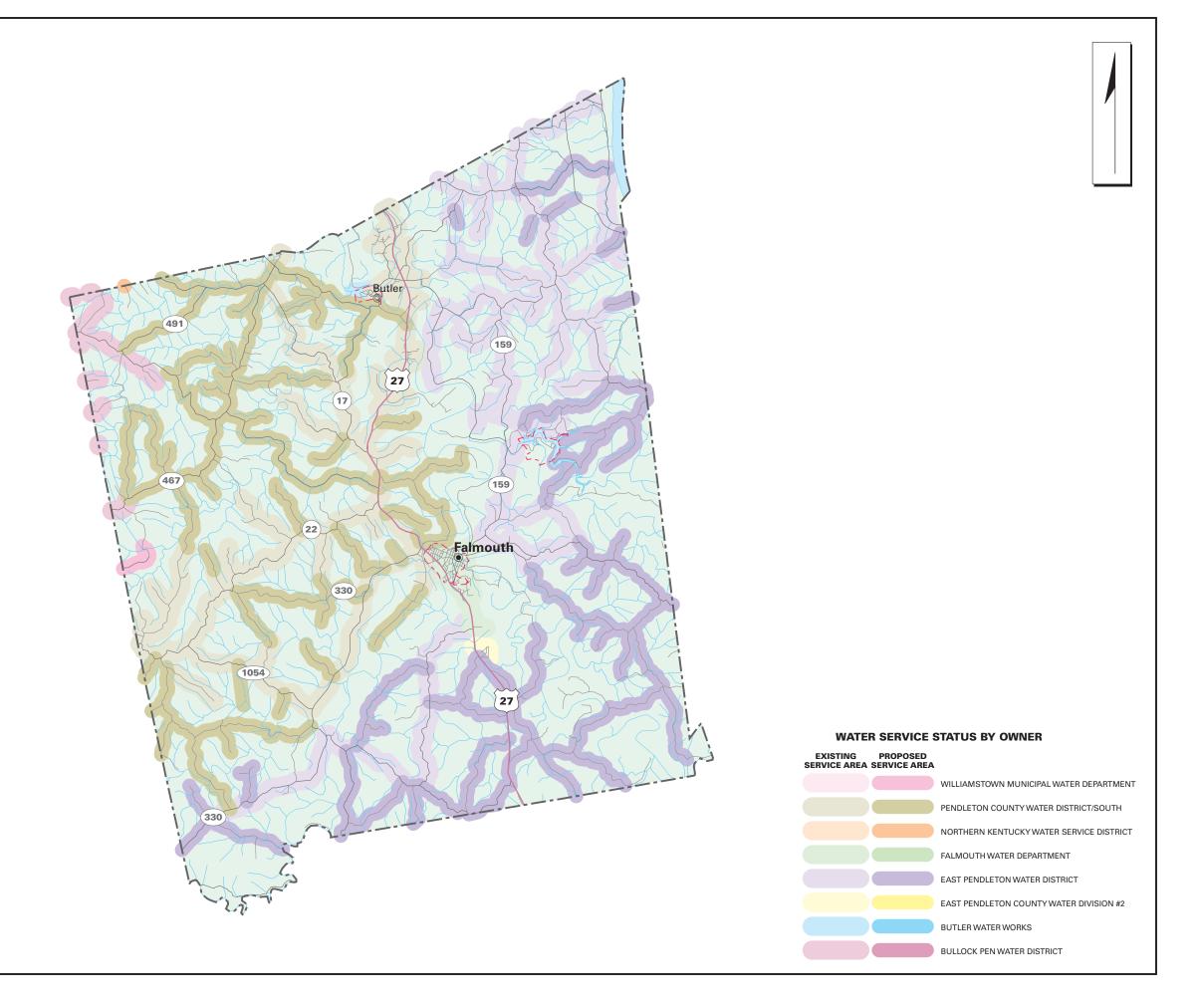








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Water Districts. Smaller areas of the county are also served by Bracken County Water District, Bullock Pen Water District, and Harrison County Rural Water Association.

BUTLER WATER WORKS

| PWSID: | MUNICIPAL |
|--|---------------|
| Treatment Plant Capacity (MGD): | 0.19 |
| Percent Daily Average Production: | 53.00 |
| Total Tank Storage Capacity (gallons): | 212,000.00 |
| Total Service Connections: | 327.00 |
| Number of Employees: | 1.00 |
| Treatment Operator Class: | 1D |
| Distribution Operator Class: | |
| Customer Rate for 1,000 Gallons: | Not available |
| O/M costs 1997: | Not available |
| O/M costs per Service Connection: | Not available |
| Net Revenue 1997: | Not available |
| Total Water Produced 1997 (gallons): | Not available |
| Water Sold 1997 (gallons): | Not available |
| Unaccounted-for Water 1997 (%): | Not available |

The Butler Waterworks draws its water from the Licking River. The system has approximately 327 service connections serving a population of 625. It has 299 residential customers who in 1998 used a total volume in of 19,098,600 gallons, 24 commercial customers who used 1,752,000 gallons, and 2 industrial customers who used 6,054,200 gallons. The average daily production of the Butler Waterworks water treatment plant was 76,750 gallons per day in 1997. There is a storage capacity of 212,000 gallons in one standpipe. The Butler Waterworks has one full-time employee.

Water service for the city of Butler is scheduled to be taken over by Pendleton County Water District within the next five years. 91 percent of Butler's population is currently being served, but the city experienced a dramatic setback in 1997 when the town was ravaged by flooding of the Licking River.

EAST PENDLETON WATER DISTRICT

| PWSID: | |
|--------------|-----------|
| System Type: | COMMUNITY |
| Owner Type: | |

| Surface Source: | |
|--|---------------|
| Purchase Source:CITY OF FALMOUTH WAT | ER DEPARTMENT |
| Well Source: | |
| Sells Water to: | |
| Treatment Plant Capacity (MGD): | 0.00 |
| Percent Daily Average Production: | |
| Total Tank Storage Capacity (gallons): | 460,000.00 |
| Total Service Connections: | 1,080.00 |
| Number of Employees: | |
| Treatment Operator Class: | 2D |
| Distribution Operator Class: | |
| Customer Rate for 1,000 Gallons: | 6.89 |
| O/M costs 1997: | 386,771.00 |
| O/M costs per Service Connection: | 359.45 |
| Net Revenue 1997: | 38,986.00 |
| Total Water Produced 1997 (gallons): | 0.00 |
| Water Sold 1997 (gallons): | 72,139,000.00 |
| Unaccounted-for Water 1997 (%): | 5.59 |

The East Pendleton Water District purchases water from the Falmouth Water District. East Pendleton has 1,080 service connections serving mostly Pendleton County with a few in households in Campbell County. Oak Haven is served by Falmouth through the Falmouth system, but East Pendleton is billed directly from Falmouth's master meter, and manages all administrative functions of the Oak Haven service. East Pendleton Water District serves 1,074 residential customers using a total volume in 1998 of 53,196,000 gallons, 6 commercial customers using 3,576,000 gallons, and 1 industrial customer using 14,970,000 gallons. The average daily usage for the last twelve months was 200,000 gallons per day. The district is strictly a water distributor, and has no treatment facilities. They have a total storage capacity of 460,000 gallons in 4 tanks located throughout the District. The East Pendleton Water District has 4 full-time employees.

The general manager of the system is very supportive of the goal of providing water service to all households in his district. He has been actively seeking funding to build waterline extensions. East Pendleton Water District serves the southern and eastern portions of Pendleton County, which is rural, with low population density, and a relatively impoverished area, which was only intensified by the floods that ravaged the area in 1997. 90 percent of the district's population is already being served, leaving the more remote households yet to be served, and dependent upon cisterns and trucked water supplies.

EAST PENDLETON COUNTY WATER DIVISION #2

| PWSID: | |
|--|---|
| System Type:COMMUNITY | |
| Owner Type:WATER DISTRICT | |
| Surface Source: | |
| Purchase Source: CITY OF FALMOUTH WATER DEPARTMENT | |
| Well Source: | |
| Sells Water to: | |
| Treatment Plant Capacity (MGD):0.00 | |
| Percent Daily Average Production:0.00 | |
| Total Tank Storage Capacity (gallons): | |
| Total Service Connections:40.00 | |
| Number of Employees: | |
| Treatment Operator Class:1D | |
| Distribution Operator Class: | |
| Customer Rate for 1,000 Gallons:Not available | |
| O/M costs 1997:Not available | |
| O/M costs per Service Connection:Not available | |
| Net Revenue 1997:Not available | |
| Fotal Water Produced 1997 (gallons):Not available | |
| Water Sold 1997 (gallons):Not available | ! |
| Unaccounted-for Water 1997 (%):Not available | |

East Pendleton County Water District Division 2 is located in Pendleton County. The system serves a population of 132 and has 40 service connections. The water district, community system purchases water from Falmouth.

FALMOUTH WATER DEPARTMENT

| PWSID: 0960126 System Type: COMMUNITY Owner Type: MUNICIPAL Surface Source: LICKING RIVER Purchase Source: Well Source: |
|---|
| Sells Water to:EAST PENDLETON WATER DISTRICT |
| Treatment Plant Capacity (MGD): |
| Percent Daily Average Production: |
| Total Tank Storage Capacity (gallons): |
| Total Service Connections: |
| Number of Employees: 4.00 |
| Treatment Operator Class: 2D |
| Distribution Operator Class: |
| Customer Rate for 1,000 Gallons:Not available |
| O/M costs 1997:Not available |
| O/M costs per Service Connection:Not available |
| Net Revenue 1997:Not available |
| Total Water Produced 1997 (gallons):Not available |
| Water Sold 1997 (gallons):Not available |
| Unaccounted-for Water 1997 (%): |

The City of Falmouth Water Department draws water from the Licking River. It has 1,300 residential customers who used a total volume in 1998 of 228,000,000 gallons, 100 commercial customers who used 42,750,000 gallons, and 3 industrial customers who used 14,250,000 gallons. The system supplies water to the Pendleton County Water District, the East Pendleton Water District, and Oak Haven subdivision. The average daily production of the City of Falmouth Water District's water treatment plant was 872,406 gallons per day in 1997. There is a storage capacity of 705,000 gallons in a tank and a reservoir located within the District. The City of Falmouth Water District has 4 full-time employees.

Nearly all of the residents of Falmouth are already being served by city water. The Water District has made great strides in recovering from the devastating flood in 1997 of the Licking River. Discussion is underway between all of the water districts in Pendleton County, including Falmouth, Butler, East Pendleton, and Pendleton County Water Districts, to consider merger into a single county water system. It seems unlikely that this will come to fruition in the foreseeable future, but the dedication and foresight of the managers of these systems is indeed noteworthy.

PENDLETON COUNTY WATER DISTRICT

| PWSID: | COMMUNITY /ATER DISTRICT |
|---|-----------------------------|
| Purchase Source: CITY OF FALMOUTH WATER | R DEPARTMENT |
| Well Source: | |
| Sells Water to: | |
| Treatment Plant Capacity (MGD): | |
| Percent Daily Average Production: | 0.00 |
| Total Tank Storage Capacity (gallons): | |
| Total Service Connections: | 1,436.00 |
| Number of Employees: | 6.00 |
| Treatment Operator Class: | 2D |
| Distribution Operator Class: | |
| Customer Rate for 1,000 Gallons: | 6.16 |
| O/M costs 1997: | 478,825.00 |
| O/M costs per Service Connection: | 351.30 |
| Net Revenue 1997: | 1,376.00 |
| Total Water Produced 1997 (gallons): | |
| Water Sold 1997 (gallons): | |
| Unaccounted-for Water 1997 (%): | |

The Pendleton County Water District purchases its water from the City of Falmouth and the Northern Kentucky Water Service District. The district has 1,356 residential service connections, with a usage of 69,602,939 gallons in 1998, 73 commercial service connections with a usage of 12,591,990 gallons and 7 industrial service connections with a usage of 9,452,020 gallons. The District has 992 customers in Pendleton County and 444 customers in Campbell County serving a total population of 4,000. The district used an average of 130,000 gallons per day from the City of Falmouth and 125,000 gallons per day from NKWSD. The district has no treatment facility of its own, but it does have two storage tanks with a total combined capacity of 256,000 gallons. The Pendleton County Water District has six full time employees.

Pendleton County Water District currently serves approximately 85 percent of the households within its jurisdiction. It is currently planning a major project that would add a new link to the Northern Kentucky Water Service District on KY 17, and take over service for the city of Butler. There remains a large geographic area in northwestern Pendleton County that needs to be served. Residents in this area have actively been petitioning for water service. The system general manager has been actively seeking funding for these projects, and hopes to be able to fulfill the residents' requests as soon as possible.

Pendleton County Water District/North is located in Pendleton County. The system serves a population of 2,336 and has 651 service connections. The water district system purchases water from northern Kentucky Water District.

Pendleton County Water District/South is located in Pendleton County. The system serves a population of 1,593 and has 483 service connections. The water district system has storage capacity of 256,000 gallons. The District purchases water from Falmouth.

PRIVATE DOMESTIC SYSTEMS

About 4,500 residents of Pendleton County rely on private domestic water supplies, primarily on hauled water or other sources.

In the valley bottoms of the Licking River, South Fork of the Licking River, Ohio River and some of the major creeks most drilled wells will produce enough water for a domestic supply

at depths of less than 100 feet. Wells located in the valley bottoms of the larger creeks will produce enough water for a domestic supply except during dry weather. In the upland areas of Pendleton County that encompasses approximately 60% of the county, most drilled wells will not produce enough water for a dependable domestic supply, except along drainage lines which may produce enough water except during dry weather.

Throughout the county ground water is hard or very hard and may contain salt or hydrogen sulfide, especially at depths greater than 100 feet.